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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,236	09/15/2003	Hubert Laurenz Naimer	UNI1773-009	2419
8698	7590	08/09/2005	EXAMINER	
STANDLEY LAW GROUP LLP 495 METRO PLACE SOUTH SUITE 210 DUBLIN, OH 43017			LIEU, JULIE BICHNGOC	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/662,236

Applicant(s)

NAIMER ET AL.

Examiner

Julie Lieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This Office action is in response to Applicant's amendment filed April 22, 2005. Claims 1-20 have been canceled. New claims 21-36 have been added.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

3. Claims 21<sup>32</sup> are rejected under 35 U.S.C. 103(a) as being unpatentable over Worden et al. (US Patent No. 5,250,947).

Claim 21:

Worden et al. (Worden) discloses an electronic display showing a graphic indicator of ANP/RNP information for RNAV environments and precision approaches for an aircraft, wherein said display comprises:

- a. a RNP symbol 32, comprising a band with an indicator centrally positioned therealong (represented by 28,32), the indicator representing a centerline of a required flightpath and the length indicating a magnitude of the required navigational performance;
- b. an ANP symbol 24 comprising a band having a length with an indicator centrally positioned therealong, the indicator representing the course of the aircraft;

- c. wherein said RNP symbol represents the RNP requirements for the aircraft and the ANP symbol moves relative to the RNP symbol on the display to depict vertical displacement of the aircraft relative to the required flight path.

Though the ANP symbol 24 depicts the altitude placement instead of lateral displacement, it would have been obvious to one skilled in the art that the symbols in Worden could be used to depict other RNP and ANP parameters such as describe lateral displacement information as desired because the function of the symbols would still be the same except for their orientation.

Worden fails to disclose that the length of the ANP symbol indicating a magnitude of actual navigational performance. However, lacking any criticality as to why it symbol must be enlarge, how it would produce any unexpected result, or what stated problem can be solved, it appears that Worden indication method for indicating the actual navigational performance by providing a numeric indicator is functionally equivalent the length of the symbol.

See figure 3.

Claim 22:

Worden shows a numeric value of RNP 34.

✓ Claims 23 and 24:

The RNP symbol 32 is comprised of a center equivalent to a hollow shape in the center of the RNP symbol 32 matching a shape of said Course symbol 26.

Claims 25 and 26:

The electronic display of claim 4, wherein the shape of said Course symbol fits inside said hollow shape of said RNP symbol when the course of said aircraft matches the centerline of the RNP course requirements for said aircraft and said flight condition.

Claims 27 and 28:

The hollow shape of RNP symbol 32 and ANP 24 are inverted chevrons.

Claim 29 and 33:

Worden fails to disclose that the length of the ANP symbol increases proportionately with increasing deviation of ANP and RNP requirements for the aircraft. However, lacking any criticality as to why it symbol must be increased, how it would produce any unexpected result, or what stated problem can be solved, it appears that Worden indication method for indicating the actual navigational performance by providing a numeric indicator is functionally equivalent the length of the symbol being proportionately increased.

Claims 32 and 36:

The length of said ANP symbol 24 appears to be limited to the size of the shape of the RNP symbol 32.

4. Claims 30, 31, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Worden et al. (US Patent No. 5,250,947) in view of Carriker et al. (US patent No. 6,571,155).

Claims 30, 31, 34, and 35:

The colors of the symbols in Worden are not discussed. However, the use of different colors to depict different status or conditions of ANP and RNP is conventional in the art as taught in Carriker et al., col. 14, first paragraph wherein a cautionary color such as yellow is used

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(changed from white) to call the operation attention of an undesired condition. In light of this teaching it would have been obvious to one skilled in the art to apply this teaching in the Worden system because it is conventional and effective in attracting attention an operator.

*Applicant's Remarks*

5. Applicant's arguments have been fully considered but they are not persuasive.

Argument:

“Of the new claims, claim 21 is an independent claim that is neither anticipated by nor obvious over Worden '947. Simply put, Worden '947 teaches an altitude tape, and the applicant admits that a vertical position tape and a horizontal position tape would be obvious variations of each other. However, an ANP/RNP display is not sufficiently similar to a tape display to permit examiner's analogy. An ANP/RNP display is comparative in nature. It appears that Worden '947 actually shows some indication of lateral deviation of the aircraft, in the lower central portion of Figure 3 to the left of the numeral 1200 but the accompanying text makes no indication of whether this is the case. Particularly, new claim 21, which is fully supported by the specification, is directed at an ANP/RNP display that comprises separate ANP and RNP symbols where the RNP symbol represents the RNP requirements for the aircraft and the ANP symbol moves relative to the RNP symbol on the display to depict lateral displacement of said aircraft relative to a required flightpath. The Examiner has not shown that Worden '947 discloses anything like this.”

***Response to Applicant's Remarks***

6. The applicant's argument is not deemed persuasive for the following reason:

Response:

Examiner's intention is not to contend whether lateral displacement indicator for lateral displacement is shown or not shown in Worden. The previous Office action, as well as this Office action stated that an similar indicator configuration for lateral display could be as an indicator for lateral displacement indication since it is only a choice in design and it is only a matter of changing the orientation of the indicator.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a stylized, flowing script.

Julie Lieu  
Primary Examiner  
Art Unit 2636

Aug. 07, 05